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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,099	02/01/2002	John B. Roes	0685-095	6030

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EXAMINER

LEE, DAVID J

ART UNIT	PAPER NUMBER
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2613

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/066,099

Applicant(s)

ROES ET AL.

Examiner

David Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-30 is/are allowed.
- 6) ☒ Claim(s) 31-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Borken et al. (US Patent No. 4,866,781).

Regarding claims 31 and 35, Borken teaches a combat interrogatory unit for use in a combat identification as friend or foe (IFF) communications system (see Abstract and fig. 1), the combat interrogatory unit comprising: projector means for projecting an infrared (IR) transmit signal (laser 22 of fig. 1) including a transmitted code of the day (TCOD) encoded as pulse positions within a predetermined frame interval (see Abstract: “encoding interrogating and retro-reflected light signals”; see also col. 3, line 59); receiver means for receiving a reflected IR transmit signal (receiver 24 and detector 26 of fig. 1) including a response code of the day (RCOD) (see Abstract: “encoding interrogating and retro-reflected light signals”); and means for combining the received RCOD with the TCOD to identify a source of the reflected IR transmit signal as friend or foe (see col. 3, lines 59-64).

3. Claims 31, 34, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Milano et al. (US Patent No. 5,870,215)

Regarding claims 31 and 35, Milano teaches a combat interrogatory unit for use in a combat identification as friend or foe (IFF) communications system (see Abstract and figs. 2 and 3), the combat interrogatory unit comprising: projector means for projecting an infrared (IR) transmit signal (e.g., see fig. 3: projector means transmits λ_1 signals) including a transmitted code of the day (TCOD) encoded as pulse positions within a predetermined frame interval (e.g., see col. 2, lines 64-67); receiver means for receiving a reflected IR transmit signal (photodiode 30 of fig. 3) including a response code of the day (RCOD) (see code receiver 105 of fig. 3); and means for combining the received RCOD with the TCOD to identify a source of the reflected IR transmit signal as friend or foe (see 103 of fig. 3; see also Abstract).

Regarding claim 34, Milano teaches means for fixing the projector means and the receiver means to a weapon (see e.g., col. 1, lines 19-23).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borken.

Regarding claim 32, Borken teaches the limitations of claim 31, but does not expressly disclose means for combining a first stored code of the day (COD) with a randomly-generated number (RGN) to produce the TCOD. A skilled artisan would have recognized that in military communications, it is highly beneficial and practical to randomize codes in order to prevent

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detection from foes. Examiner takes Official notice that it is well known in the art to randomly generate stored codes to produce a code of the day. It would have been obvious to a skilled artisan at the time of invention to do so in order to protect military communications.

6. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borken in view of Gerber (US Patent No. 5,966,226).

Regarding claims 33 and 34, Borken teaches the limitations of claims 31 and 32 but does not expressly disclose means for fixing the projector means and the receiver means to a weapon. However, it is well known to use IFF communication systems for military use. For example, Gerber, from a similar field of endeavor, teaches an IFF communication system (see Abstract) comprising means for fixing a projector and receiver to weaponry (see e.g., fig. 1). It would have been obvious to a skilled artisan at the time of invention to combine the teachings of Borken and Gerber in order to facilitate accurate and effective military communication.

7. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milano.

Regarding claim 32, Milano teaches the limitations of claim 31, but does not expressly disclose means for combining a first stored code of the day (COD) with a randomly-generated number (RGN) to produce the TCOD. A skilled artisan would have recognized that in military communications, it is highly beneficial and practical to randomize codes in order to prevent detection from foes. Examiner takes Official notice that it is well known in the art to randomly generate stored codes to produce a code of the day. It would have been obvious to a skilled artisan at the time of invention to do so in order to protect military communications.

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Regarding claim 33, Milano teaches means for fixing the projector means and the receiver means to a weapon (see e.g., col. 1, lines 19-23).

Allowable Subject Matter

8. Claims 1-30 are allowed.

Response to Arguments

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lee whose telephone number is (571) 272-2220. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Lee
Patent Examiner



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